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ABSTRACT

To serve communities interested in starting recreation programs, various factors influencing the use of recreational facilities (such as income, education, age, and occupation) are examined; 4 community prerequisites for running a successful recreation program (a legally constituted, local managing authority; indoor and outdoor facilities; professional paid leadership; and sufficient money to run a program) are discussed; standards for various types of recreational facilities (such as radius of area to be served by a children's playlot and acres needed per 1000 population) are presented; and requirements for multiple recreation areas (children's playgrounds, neighborhood parks, and youth and adult playfields) are analyzed in terms of age group to be served, size of area, location, facilities, apparatus, and games and sports to be supported. (B0)

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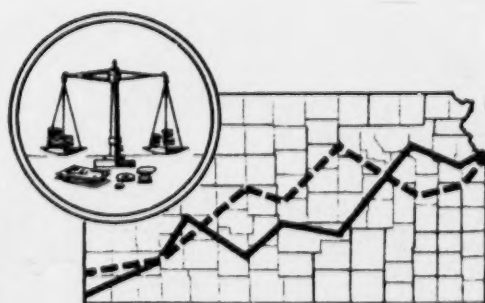
Requirements for Outdoor Recreation

(Sports and Games)



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TRENDS OF THE MAJOR FACTORS WHICH AFFECT THE NEED FOR OUTDOOR RECREATION

Factor	Rate of Increase by 2000
Population	DOUBLE
Disposable Income	QUADRUPLE
Leisure Time	INCREASE BY 1/3
Auto Travel	QUADRUPLE

EXPECTED INCREASE IN PARTICIPATION OF CERTAIN ACTIVITIES

Activity	% Increase 1960-2000
Hiking	611%
Water Skiing	576%
Camping	545%
Sightseeing	474%
Boating	417%
Swimming	400%

Many communities are interested in starting recreation. Some ask whether the community is too small. No community, having at least one person really interested in good recreation for all, is too small to do something about this important service. Many cities in the United States having less than 10,000 population and some with less than 1,000 have recreation programs.

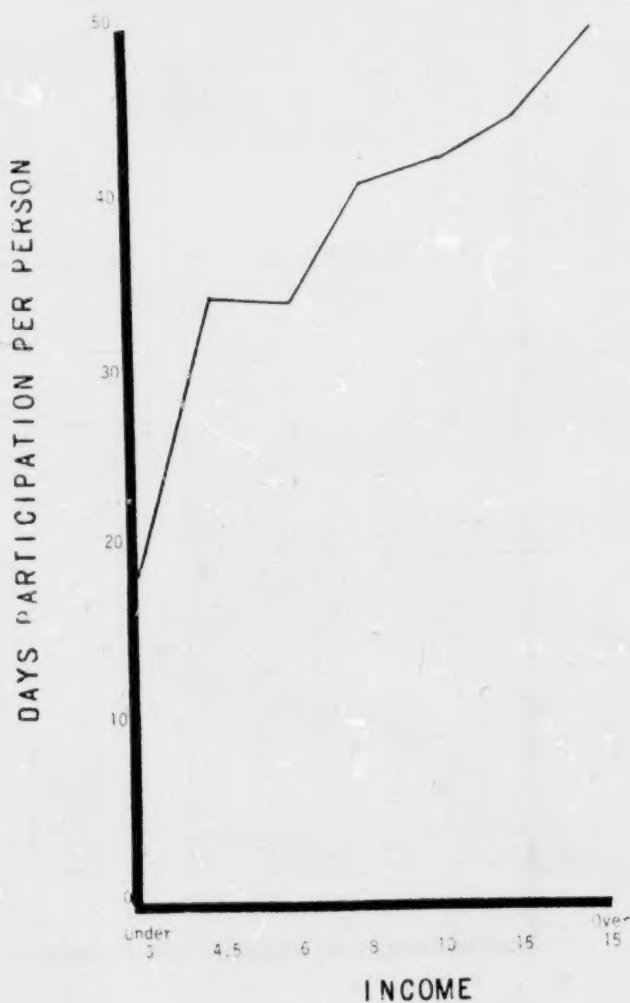
There are four simple, fundamental factors that must be strongly developed to make possible an adequate recreation program, whether the population of the community is one thousand or one million. These are: (1) a strong and interested managing authority which is recognized by local citizens as the official body responsible for recreation; (2) facilities, indoor and outdoor, in which and upon which recreation activities can be conducted; (3) professional paid leadership in the form of one or more persons whose responsibility is to give time and thought and energy to the problem of organizing and maintaining a program that will serve the needs of citizens of all ages; (4) sufficient money, either from public or private sources, to acquire, maintain and operate the needed facilities, and to pay the leaders, purchase supplies and necessary services.

To comment further on these numbered items:

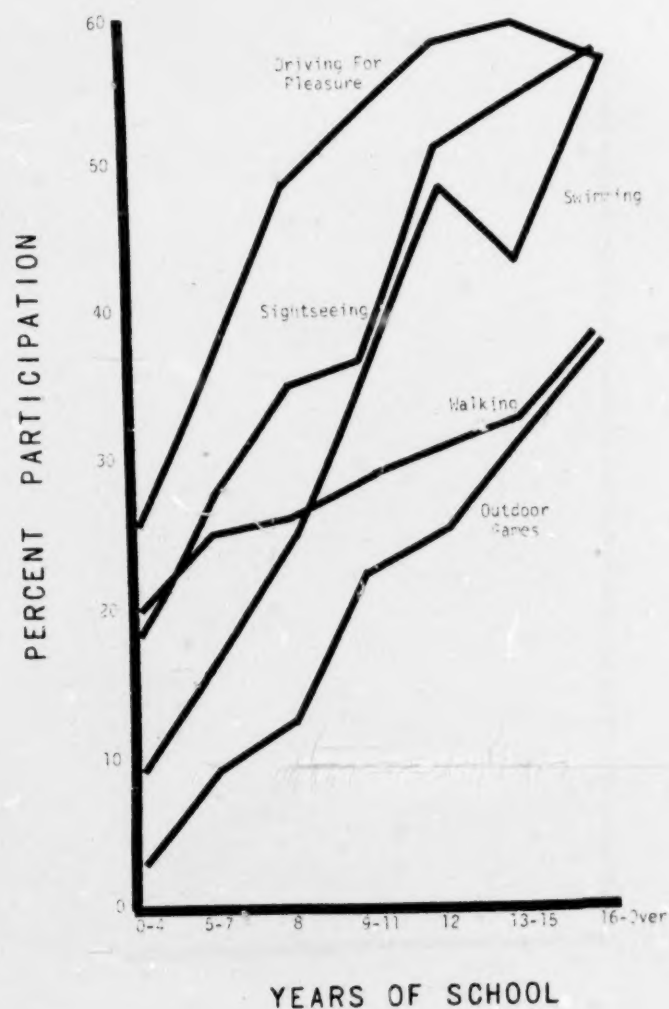
- (1) Request the person serving as legal counsel to the community to check the state laws regarding public recreation in municipalities of the class to which yours belongs and to see whether it is legally possible to set up the local managing authority by local ordinance. This should be done if possible. To give the managing authority official standing it is considered good practice to have its members appointed for specified terms by the Mayor or by the local governing authority.

- (2) The community may already own land suitable for development as playgrounds, or in a location that would make a good central site for a recreation building. There may be existing buildings, public or private, which could at least temporarily house the indoor recreation activities. Sometimes there is an abandoned school or church or business building which can be adapted for recreation use. If there are no publicly owned properties, some land for these purposes should be acquired as soon as possible by the municipality. In the meantime arrangements should be made to borrow or lease enough private property to support the program.

EFFECT OF INCOME ON RECREATION



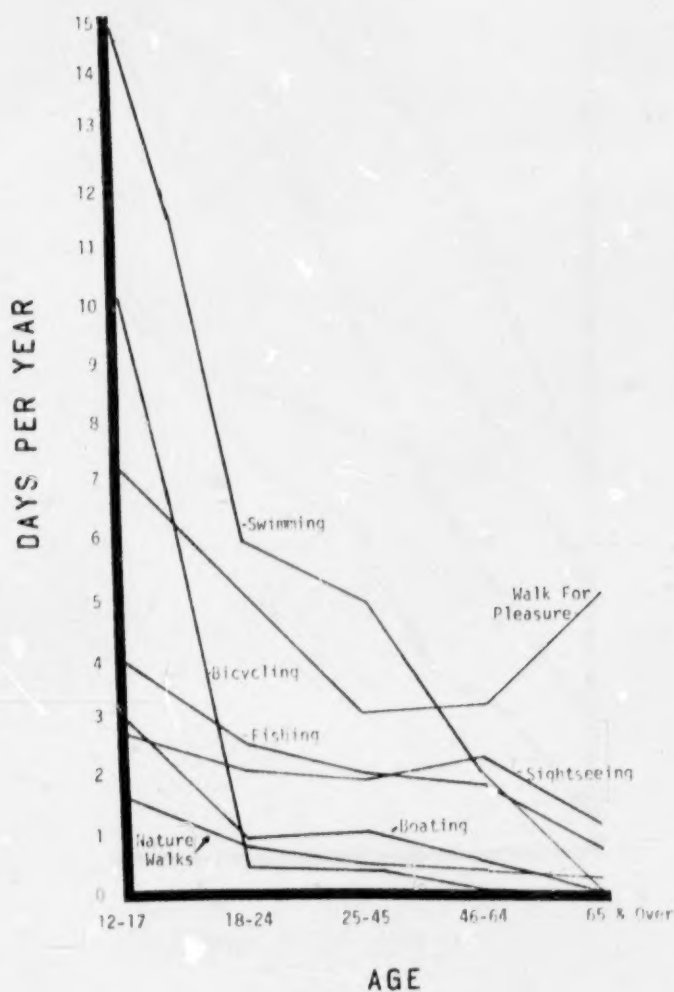
EFFECT OF EDUCATION ON RECREATION



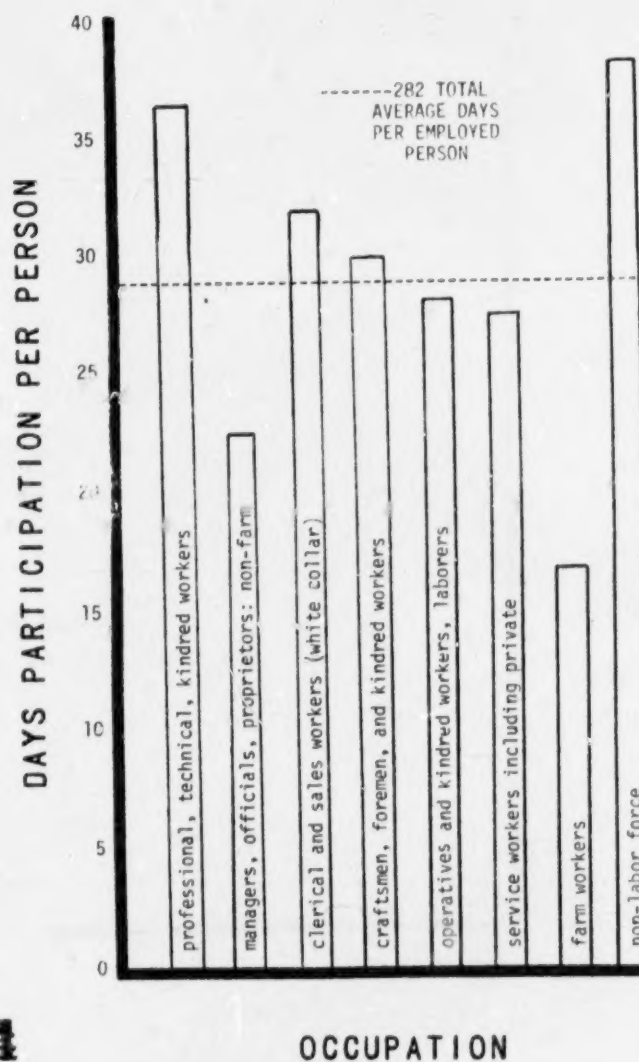
(3) The employment of full-time leadership as early as possible is important. If this is out of the question at first, the program can be started with the employment of a part-time or seasonal person. Frequently a man or woman can be found among the local school personnel who has had both training and experience in the field of recreation and who can give part-time during the school year, and perhaps full-time during the summer months, to the recreation program. Care should be taken not to employ a person who has no real qualifications or who is only interested in a job to supplement his or her main employment. Good personnel is the keystone of success in recreation.

(4) For a fully adequate program of active organized recreation it is estimated that a community would need to spend about \$3 per capita of the total population per year. Many cities start with much less and gradually increase the per capita expenditure as the program expands and becomes better known to all the citizens. Since public recreation is for all citizens the logical source for its support is the local municipal tax budget of the school tax budget. Where the year's budget setting period is past or for any reason neither the municipal government nor the school government are in a position to appropriate funds for recreation, the temporary alternative is for an interested group to organize and conduct a campaign for private contributions and donations in sufficient amount to provide the budget needed for the first season.

EFFECT OF AGE ON RECREATION



EFFECT OF OCCUPATION ON RECREATION



RECREATION STANDARDS

The various standards outlined here are in direct relation to their type and function. To understand their full meaning the individual should become somewhat acquainted with their background and basis of value. Each standard has variations. The usual development includes more than one specific type of area. So it is true that each area can interpret to some degree what is considered to be the "standard" in order to meet a realistic plan for that area. The standards here are very similar to those prepared by the National Recreation Assn., the American Society of Planning Officials, and many municipal, regional, and national planning organizations. They should be considered more as minimum rather than maximum standards.

Playlot Area

2,500 to 10,000 sq. ft. recommended. 2,500 sq. ft. minimum; 75 sq. ft. per child; 1/4 mile maximum service radius; 1/8 mile recommended in high density area; space available should serve 40 children per 100 families at one time; frequently cannot be provided by municipality except as part of larger play areas; provisions otherwise dependent on other than municipal help.

Playground Area

3 to 7 acres; 1.5 acre per 1,000 population; maximum population to be served by single playground, 5,000; preferably adjacent to elementary school or centrally located; 15 sq. ft. per child playing at one time; 1/4 to 3/8 mile service radius; 1/2 mile may be accepted under special conditions in low density areas.

Playfield Area

20 acres and over recommended; 10 acre minimum; one playfield per 15,000 to 25,000 population; 1.5 acre per 1,000 population; preferably adjoining high school property; 1 mile service radius - 1 1/4 mile at low density.

Recreation Park Area

30 or more acres; 1 acre per 1,000 population; in smaller areas especially, topography and natural scenery more important than standard spacing; service radius 1 mile and above, depending upon size and features of area.

ACREAGE STANDARDS FOR RECREATION AREAS

Type of Area	Acres needed per 1,000 population	Effective radius	Desirable size	Minimum size
Playgrounds	1.5 acres	0.5 miles	4 acres	2 acres
Neighborhood Parks	1.5 acres	0.5 miles	10 acres	5 acres
Play Fields	1.25 acres	1.5 miles	20 acres	10 acres
Community Parks	3.5 acres	2.0 miles	100 acres	40 acres
District Parks	2.0 acres	3.0 miles	200 acres	100 acres
Regional Parks and Reservations	15.0 acres	10.0 miles	1,000 acres	500 acres

Recreation Building

One building for each 20,000 population depending upon population density and traffic congestion; should include gymnasium, social room, informal reading and quiet-game room, game room, arts and crafts shop for each 10,000 population or less, auditorium or assembly hall for each 20,000 or less and multiple-use clubroom for each 5,000 or less.

Golf Course

9 hole public course for community of 25,000 or less; minimum 65 to 70 acres, 9-hole course; 160 acres, 18-hole course.

Swimming Facilities

Sufficient facilities to serve 3 percent of the population at one time; approximately 12 square feet of water space per swimmer.

Camps

Minimum desirable size - 20 acres.

Athletic Field or Stadium

5 to 20 acres recommended. 10 acres desirable.

ACTIVITIES SPACE REQUIREMENTS

Activity	Space Requirements	Ideal Size
Golf	1, 18 hole course per 10,000 population or less (Kansas)	125 acres
Swimming Pool	1 outdoor pool per 25,000 population	2 acres
Tennis	1.0 acres per 5,000 population	2 acres
Field Sports	1.5 acres per 1,000 population	15 acres
Playfield for Young Children	1.25 acres per 1,000 population	3 acres
Children's Play Area	0.5 acre per 1,000 population	1 acre

Outdoor Theater

One to each 100,000 population providing seating capacity between 1,000 and 10,000; in some communities need is for number of small informal neighborhood outdoor theaters.

Tennis Courts

1 court to each 2,000 population. A hard surface is recommended.

Baseball and Softball Diamonds

1 baseball diamond to each 6,000 population; 1 softball diamond to each 3,000 population.

FACILITIES SPACE REQUIREMENTS

Facilities	Center Next to Elem. School	Separate Center
Playlot	.25	.25
Elementary age play area	.35	.35
Nature and science hobby area	.30	.30
Paved area for court games	.50	1.00
Field for sports	--	6.00
Night lighting (need for acreage depends on design)	--	.25
Instructional swim pool	.20	--
Family picnic and barbecue area	1.50	1.50
Parklike area for free play	.50	1.00
Neighborhood Center building	--	.35
Quiet area	.25	.25
Older people: turfed area	.50	.50
building space	.10	.10
paved area	.10	.10
Off street parking	.40	.60
Landscaping	1.49	3.77
TOTAL ACRES	6.44	16.32

MULTIPLE RECREATION AREAS

NEIGHBORHOOD PARKS

Age Group

1. All ages. (population served, roughly 4,000 to 7,000 people)
2. Mothers with small children and older people.
3. Family groups.

Size of Area

1. Acres per 1,000 population, 1.5 acres.
2. Ideal size of site 10 acres.
3. Minimum size of site 5 acres.
4. Radius of area served, 0.5 miles.

Location

1. Center of neighborhood.
2. Part of playground or playfield.
3. Connected with school or community center.
4. Serves neighborhoods that are beyond walking distance of larger parks.
5. Not needed where large park within walking distance of neighborhood.
6. Should take advantage of natural or scenic features where possible.
7. Unbuildable land often suitable.
8. One and one-half to two acres as part of playground or playfield, to seven acres when separate.
9. May consist of landscaped buffer strips between residence and shopping or other uncongenial uses.
10. May be green strips along waterways or between parks and active recreation areas.
11. May be pedestrian greenways, or "fingers" between homes and shopping, school and recreations.
12. In form, should give leisurely park feeling.

Facilities

1. Places for sitting, sunning, and for quiet relaxation.
2. Lawns, shrubbery, trees, walks, benches.
3. Softball and other games.

PLAYFIELDS

4. Play equipment, multiple use paved areas.
5. Turf areas and planting.
6. Some rustic and passive areas desirable.
7. Minimum of automobile parking.

Age Group

1. Youth and adults.
2. Ages 15 years and older.
3. Family groups.
4. Population served, 15,000 to 25,000 persons.

Size of Area

1. Acres per 1,000 population, 1.25 acres.
2. Ideal size of site 10 acres.
3. Minimum size of site 5 acres.
4. Radius of area served, 1.5 miles.
5. Part of some of larger playfields should be developed as athletic fields for highly organized, competitive sports for use by teams and organizations on scheduled basis.
6. Facilities to include large space for running track and major sports; field house with showers, lockers, and toilets if not provided in school; and accommodations for large number of spectators-bleachers, grandstand or stadium, and parking space. Minimum size, five acres, with 10 acres desirable. To serve roughly 50,000 people, within service area of two miles. Because of noise and congestion should be insulated from residential areas by location and buffer.

Location

1. Adjacent to junior or senior high school.
2. Center of every four or five neighborhoods.
3. Convenient to public transportation.

Facilities

1. An area for active organized play.
2. Provision for activities that require more space than playgrounds, but including one section developed as playground.
3. Sports fields for softball, baseball, football, field hockey, soccer, volleyball.
4. Courts for tennis, horseshoes, shuffleboard, bocce.
5. Areas for croquet, archery, bowling, clock golf. (part of these areas could be developed as a center for older people)
6. Picnic areas and facilities.
7. Bandstand or outdoor theater.
8. Outdoor swimming pool, or indoor-outdoor pool as part of school or recreation center.

SUGGESTED ACREAGE FOR PLAYFIELD SPACES

<u>Space</u>	<u>Acreage</u>
1. Area for children's playground	1 to 2
2. Area for game courts	1 to 2
3. Field for men's sports	4 to 7
4. Field for women and girls	2 to 3
5. Area for lawn games	1 to 2
6. Swimming pool area	.5 to 1
7. Playfield building site	.5 to 1
8. Area for special features	1 to 2
9. Parking area	1 to 2

PLAYGROUNDS

Age Group

1. All ages.
2. Family groups.
3. Primary center for elementary school children of 5 to 15 years.
4. Center for neighborhood special events - festivals, holiday celebrations, community signs.

Size of Area

1. Acres per 1,000 population.
2. Ideal size of site 4 acres.
3. Minimum size of site 2 acres.
4. Radius of area served, 0.5 miles.

Location

1. Adjacent to elementary school.
2. Within playfield in neighborhood where playfield is located.
3. In center of neighborhood.
4. Located so that children do not have to cross major street, railroads, industrial or business areas, or other hazardous conditions to go from home to playground, or school to playground if two not on the same site.

Facilities

1. Corner for pre-school children.
2. Park area for sitting, and other passive recreation.
3. Recreation equipment for older people.
4. Apparatus area for older children.
5. Open space for informal play.
6. Space for tennis, softball, handball, and volleyball.
7. Area for older people for bowling, croquet, horseshoe, and games.
8. Handicraft and quiet game area.
9. Wading or swimming pool.
10. Shelter as center of control, with ideally game and club rooms.
11. Landscaped buffer strip to protect neighborhood from playground noise.
12. Night lighting for evening use by older children.
13. Border landscaping and fencing.
14. Minimum of automobile parking.
15. Some rustic and passive area desirable.
16. Multiple use paved areas.

PLAYGROUND APPARATUS

Type Apparatus	Length in Feet	Height in Feet	Space in Feet	Space in Sq. Ft.
Balance Beam	12	.5	6 x 20	
Climbing Structure (average)	10	10	20 x 20	400
Climbing Tree or Ladder	5 dia.	12	10 x 10	100
Giant Stride		12	32 x 32	1,024
Horizontal Bar	6	8	12 x 20	240
Horizontal Ladder	12-16	6.5-7.5	10 x 30	300
Junglegym (junior)	6.5	7	12 x 15	180
Junglegym (medium)	10	10.5	20 x 20	400
Merry-go-round	10 dia.	3.5	25 x 25	625
Sand Box	6 x 10 min.	1	15 x 20 min.	300
See-Saws (set-4)	12	2	20 x 20	400
Slide	16	8	12 x 30	360
Slide, Gang	16	8	25 x 40	1,000
Slide, Kindergarten	8	4.5	8 x 20	160
Slide, Racer	16	8	20 x 30	600
Swings (set of 3)	15 at top	12	30 x 35	1,050
Swings (set of 6)	30 at top	12	30 x 50	1,500
Swings (set of 4)	18 at top	10	24 x 30	720
Traveling Rings (in line)	40 at top	12	20 x 20	400
Traveling Rings (circular)	10 dia.	12	25 x 25	625

REQUIREMENTS FOR GAMES AND SPORTS

Name	Dimension in Feet	Use Dimension in Feet	Space In Sq. Feet	Players
Archery	90-300 in length target 15' apart	50 x 175 min. 50 x 400 max.	8,750	2 or more
Badminton	17 x 44 singles 20 x 44 doubles	25 x 60 30 x 60	1,500 1,800	2 4
Baseball	90' Diamond	250 x 350 with backstop 400 x 400 with- out	122,500	18
Basketball	50 x 94	60 x 100	6,000	10
H.S. boys	50 x 84	60 x 90	5,400	
H.S. girls	35 x 70	45 x 80	3,600	12
Bowling on the green	14 x 110 (1 alley)	130 x 130	16,900	32-64
Bowling alley	3 1/2 x 62	10 x 100	1,000	2 or more
Box Hockey	4 x 10	15 x 20	300	2
Cricket	Wickets 66' apart	420 x 420	176,400	22
Croquet	30 x 60	40 x 75	3,000	2-8
Curling	14 x 138	25 x 160	4,000	2 or more
Deck tennis	14 x 40 singles 17 x 40 doubles	20 x 50 26 x 50	1,000 1,300	2 4
Field Hockey	150 x 270 min. 180 x 300 max.	210 x 330 ave.	69,300	22
Football	160 x 360	190 x 420	79,800	22
Handball	20 x 34	32 x 44	1,408	2 or 4
Hand tennis	16 x 40	25 x 60	1,500	2 or 4
Horseshoes	stakes 40' apart	12 x 52	624	2 or 4
men	stakes 30'-40' apart	12 x 42	504	2 or 4
women				
Ice hockey	60 x 165 min. 110 x 250 max. 85 x 200 around	100 x 220 ave.	22,000	12
Lacrosse	180 x 330 min.	225 x 360 ave.	81,000	24
men	210 x 350 max.			
women	Goals 270'- 330' apart No definite boundaries	240 x 360 ave.	86,400	24
Paddle tennis	16 x 44 singles 70 x 44 doubles	30 x 70 35 x 70	2,100 2,450	2 4
Polo	600 x 960 max.	600 x 960	576,000	8

REQUIREMENTS FOR GAMES AND SPORTS cont.

Name	Dimension in Feet	Use Dimension in Feet	Space In Sq. Feet	Players
Shuffleboard	6 x 52	10 x 70	2,800	2 or 4
6 man football	120 x 300	180 x 360	81,000	22
Soccer				
men	120 x 240 180 x 300	200 x 360 ave.	81,000	22
women	120 x 240 180 x 300	200 x 320	64,000	22
Softball				
men	60' diamond	275 x 275	75,625	18
women	60' diamond	250 x 250	62,500	18
Speedball				
men	160 x 360 max.	200 x 420	84,000	22
women	180 x 300	220 x 350	77,000	22
Table tennis	5 x 9	12 x 20	240	2 or 4
Tennis	27 x 78 singles 36 x 78 doubles	50 x 120 60 x 120	6,000 7,200	2 4
Tetherball	Circle 6' dia.	20 x 20	400	2
Touch Football	160 x 360	190 x 420	79,800	18-22
Volleyball	30 x 60	45 x 80	3,600	12-16

REQUIREMENTS FOR CHILDREN'S GAMES

Name	Dimension in Feet	Use Dimension in Feet	Space In Sq. Feet	Players
Archery	60 x 150 in length targets 15' apart	50 x 135 min. 50 x 235 max.	6,750 11,750	2 or more
Baseball	75' diamond 82' diamond	250 x 250	62,500	18
Basketball	40 x 60	50 x 70	3,500	10
Hopscotch	5 x 12 1/2	10 x 20	200	2 or more
Marbles	10' dia.	18 x 18	1,500	4
Paddle tennis	13 1/2 x 39 sgls. 18 x 39 doubles	25 x 60 30 x 60	1,500 1,800	2 4
Softball	45' diamond	175 x 175	30,625	18
Team Dodge Ball				
Boys	Circle 40' dia.	60 x 60	3,600	20
Girls	Circle 35' dia.	50 x 50	2,500	20
Touch football	120 x 240	140 x 280	39,200	18-22
Volleyball	25 x 50	40 x 70	2,800	12-16

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